

## THE SPOT ON VENUS.

HOW IT WAS DISCOVERED BY PROF. LANGLEY.

PITTSBURG, Penn., Dec. 8.—Prof. S. P. Langley, whose discovery during the recent transit of Venus of a remarkable and heretofore unobserved spot on the body of that planet has awakened such general interest in scientific circles, was interviewed by your correspondent to-night. "Have you completed your calculations upon the results achieved in the observations of the transit?" inquired the writer.

"No, Sir, we have not," replied the Professor. "Many months will elapse before that work can be accomplished. The full results of the recent transit will not be known definitely for years."

"What achievements were especially anticipated by scientists in their observations on the recent transit?"

"Quite a number. One was to correct the total error of previous observations as to the distance of the sun. This task was about equal to placing an average human hair at a distance of 180 yards and trying to measure its thickness. That about represents the angular amount that is in the question. The whole thing turns on a certain angle called the solar parallax."

"About this spot on the body of the planet Venus, had you anticipated anything of the kind?"

"No, Sir. In previous observations a rim of light has been noticed circling the edge of the planet before its entrance upon the disk of the sun. I determined to pay special attention to this feature of the transit, and instructed my assistants to the same effect. It was owing to our attention being concentrated upon this feature of the transit that the discovery of the spot was made. Other observers directed their efforts to the observances of the first contact, the formation of the black drop, and other points of equal interest."

Drawing a diagram in order to enlighten your correspondent the Professor continued: "The line of light on the edge of the planet was plainly defined, but in addition to it I observed a spot extending inward one-fourth the radius of the planet and along the edge, approximately one-twelfth of the whole circumference. I observed it closely, and as the planet entered the sun the spot widened, apparently, stretching out along the edge, and disappearing finally when Venus was wholly upon the disk of the sun."

"What theory have you for the appearance of this phenomenon?"

"I have none at all. It is wholly inexplicable. Owing to the wavering edge I could not be positive that the spot was wholly upon the body of the planet. It might have been a protuberance. In that case, I am also unable to account for it. From its appearance, however, I judge that it covered 2,000 miles or more of the planet. It might be due in some way to refraction, caused by an extraordinary protuberance of the atmosphere of Venus, though why such a protuberance should exist we are at a loss to say."

Prof. Langley at this point retired, and his assistant, Mr. Keeler, remarked, "Aside from the observation to determine the distance of the sun, we consider as probably next in importance the spectroscopic observations of Prof. Young, of Princeton, affording, as he says, unmistakable evidence of the presence of water upon Venus. The presence of water upon the planet Venus suggests the probability of inhabitants. No astronomer would care to say that Venus is not inhabited," replied the gentleman with a laugh. The presence of water renders this more probable.